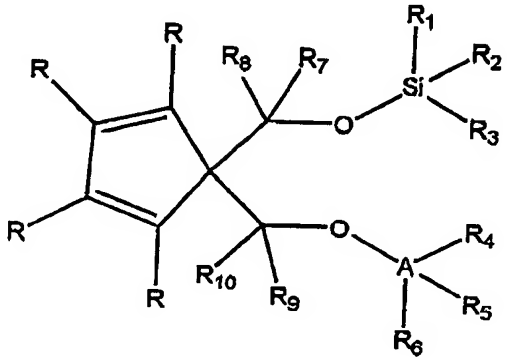
What is claim d is:

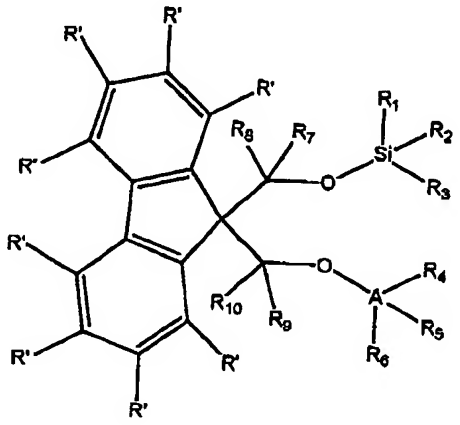
1. A silicon ether compound having general formula (I):



(I)

wherein, R and R_1-R_{10} groups, which may be identical or different, represent hydrogen, halogen, C_1-C_{20} linear or branched alkyl, C_3-C_{20} cycloalkyl, C_6-C_{20} aryl, C_7-C_{20} alkaryl or C_7-C_{20} aralkyl, and two or more R groups can be bonded to each other to form one or more saturated or unsaturated condensed cyclic structures which are optionally substituted by a group having the same meanings with that of R_1; R and R_1-R_{10} groups optionally contain one or more hetero-atoms replacing carbon atom, hydrogen atom or the both, said hetero-atom is selected from the group consisting of nitrogen, oxygen, sulfur, silicon, phosphorus and halogen atom; and A represents carbon atom or silicon atom.

2. The silicon ether compound according to claim 1, having a structure represented by general formula (II):



(II)

Wherein, R_1-R_{10} groups and A have meanings as defined in formula (I), and R', which may be id ntical or different, represent hydrogen, halogen, C_1-C_{20} linear or branched alkyl,

C_3-C_{20} cycloalkyl, C_6-C_{20} aryl, C_7-C_{20} alkaryl or C_7-C_{20} aralkyl.

3. The silicon ether compound according to claim 2, wher in A represents carbon atom, R_1-R_3, which may be identical or different, represent methyl, ethyl, n-propyl, iso-propyl, n-butyl, tert-butyl or phenyl, R_4-R_6, which may be identical or different, represent hydrogen, methyl, ethyl, n-propyl, iso-propyl, n-butyl, tert-butyl or phenyl, and R_7-R_{10} and R' are hydrogen.

4. The silicon ether compound according to claim 2, wherein A represents silicon atom, R_1-R_6, which may be identical or different, represent methyl, ethyl, n-propyl, iso-propyl, n-butyl, tert-butyl or phenyl, and R_7-R_{10} and R' are hydrogen.

5. The silicon ether compound according to claim 1, which can be selected from the group consisting of:

9-methoxymethyl-9-(trimethylsilyl)oxymethyl-fluorene,
9-methoxymethyl-9-(triethylsilyl)oxymethyl-fluorene,
9-methoxymethyl-9-(triphenylsilyl)oxymethyl-fluorene,
9-methoxymethyl-9-(ethyl-dimethyl-silyl)oxymethyl-fluorene,
9-methoxymethyl-9-(dimethyl-propyl-silyl)oxymethyl-fluorene,
9-methoxymethyl-9-(tert-butyl-dimethyl-silyl)oxymethyl-fluorene,
9-methoxymethyl-9-(dimethyl-phenylethyl-silyl)oxymethyl-fluorene,
9-methoxymethyl-9-(dimethyl-phenyl-silyl)oxymethyl-fluorene,
9-ethoxymethyl-9-(trimethylsilyl)oxymethyl-fluorene,
9-ethoxymethyl-9-(triethylsilyl)oxymethyl-fluorene,
9-ethoxymethyl-9-(triphenylsilyl)oxymethyl-fluorene,
9-ethoxymethyl-9-(ethyl-dimethyl-silyl)oxymethyl-fluorene,
9-ethoxymethyl-9-(dimethyl-propyl-silyl)oxymethyl-fluorene,
9-ethoxymethyl-9-(tert-butyl-dimethyl-silyl)oxymethyl-fluorene,
9-ethoxymethyl-9-(dimethyl-phenylethyl-silyl)oxymethyl-fluorene,
9-ethoxymethyl-9-(dimethyl-phenyl-silyl)oxymethyl-fluorene,
9-n-propoxymethyl-9-(trimethylsilyl)oxymethyl-fluorene,
9-n-propoxymethyl-9-(triethylsilyl)oxymethyl-fluorene,
9-n-propoxymethyl-9-(triphenylsilyl)oxymethyl-fluorene,
9-n-propoxymethyl-9-(ethyl-dimethyl-silyl)oxymethyl-fluorene,
9-n-propoxymethyl-9-(dimethyl-propyl-silyl)oxymethyl-fluorene,

9-n-propoxymethyl-9-(tert-butyl-dimethyl-silyl)oxymethyl-fluorene,
9-n-propoxymethyl-9-(dimethyl-ph nylethyl-silyl)oxymethyl-fluoren ,
9-n-propoxym thyl-9-(dimethyl-phenyl-silyl)oxymethyl-fluoren ,
9,9-bis((trimethylsilyl)oxymethyl)fluorene,
9,9-bis((triethylsilyl)oxymethyl)fluorene,
9,9-bis((triphenylsilyl)oxymethyl)fluorene,
9,9-bis((ethyl-dimethyl-silyl)oxymethyl)fluorene,
9,9-bis((dimethyl-propyl-silyl)oxymethyl)fluorene,
9,9-bis((tert-butyl-dimethyl-silyl)oxymethyl)fluorene,
9,9-bis((dimethyl-phenylethyl-silyl)oxymethyl)fluorene,
9,9-bis((dimethyl-phenyl-silyl)oxymethyl)fluorene,
2-fluoro-9,9-bis((trimethylsilyl)oxymethyl)fluorene,
2-fluoro-9,9-bis((triethylsilyl)oxymethyl)fluorene,
2-fluoro-9,9-bis((triphenylsilyl)oxymethyl)fluorene,
2-fluoro-9,9-bis((ethyl-dimethyl-silyl)oxymethyl)fluorene,
2-fluoro-9,9-bis((dimethyl-propyl-silyl)oxymethyl)fluorene,
2-fluoro-9,9-bis((tert-butyl-dimethyl-silyl)oxymethyl)fluorene,
2-fluoro-9,9-bis((dimethyl-phenylethyl-silyl)oxymethyl)fluorene,
2-fluoro-9,9-bis((dimethyl-phenyl-silyl)oxymethyl)fluorene.

6. A method for the preparation of a silicon ether compound of formula (I), wherein A is carbon atom, according to claim 1, comprising a step of:

reacting a 3-hydrocarbyloxy-propanol compound with trihydrocarbylsilylating agent in an aprotic inert solvent and, if needed, in the presence of a base, to form corresponding γ-trihydrocarbylsilyloxy-ether compound.

7. The method according to claim 6, wherein the solvent is selected from the group consisting of dichloromethane, chloroform, benzene, toluene, n-hexane, cyclohexane, petroleum ether, diethyl ether, tetrahydrofuran, tert-butyl methyl ether and N,N-dimethylformamide.

8. The method according to claim 6, wherein the trihydrocarbylsilylating agent is selected from the group consisting of trihydrocarbylsilyl halide and hexahydrocarbyl disilazane.

9. The method according to claim 8, wherein the trihydrocarbylsilylating agent is selected

from the group consisting of trimethylsilyl chloride, tri thylsilyl chloride, triph nylsilyl chloride, ethyldimethylsilyl chloride, dimethylpropylsilyl chloride, tert-butyldimethylsilyl chloride, dimethylphenylsilyl chloride, dimethyl-ph nylethyl-silyl chloride, and hexamethyl disilazane.

10. The method according to claim 6, wherein a trihydrocarbylsilyl halide is used as the trihydrocarbylsilylating agent, the reaction is carried out in the presence of a base, and the raw materials are charged at such amounts that molar ratio of 3-hydrocarbyloxy-propanol compound : trihydrocarbylsilyl halide : base is in the range of 1 : 1-2 : 1-2.

11. The method according to claim 10, wherein the base is selected from the group consisting of Na, K, NaOH, KOH, NaH, KH, CaH_2, Na_2CO_3, K_2CO_3, NH_3, Et_3N, Me_3N, Bu_3N, pyridine, imidazole, 4-dimethylaminopyridine, and mixture thereof.

12. The method according to claim 6, wherein a hexahydrocarbyl disilazane is used as th trihydrocarbylsilylating agent, the reaction is carried out in the absence of base, and the raw materials are charged at such amounts that molar ratio of 3-hydrocarbyloxy-propanol compound : hexahydrocarbyl disilazane is in the range of 1 : 0.5-0.8.

13. The method according to claim 6, wherein reaction temperature is in the range from -20℃ to 100℃, reaction pressure is atmospheric pressure, and reaction time is in th range from 1 to 48 hours.

14. The method according to claim 6, wherein the 3-hydrocarbyloxy-propanol compound is 9-hydrocarbyloxymethyl-9-hydroxymethyl-filuorene compound, which reacts with a trihydrocarbylsilylating agent to form a 9-hydrocarbyloxymethyl-9-trihydrocarbylsilyloxymethyl-filuorene compound.

15. A method for the preparation of a silicon ether compound of formula (I), wherein A is silicon atom, according to claim 1, comprising a step of:

reacting 1,3-propandiol compound with trihydrocarbylsilylating agent in an aprotic inert solvent and, if needed, in the presence of a bas , to form corresponding 1,3-bis(trihydrocarbylsilyloxy)-propane compound.

16. The method according to claim 15, wherein the solvent is selected from the group consisting of dichloromethane, chloroform, benzen , toluene, n-hexane, cyclohexane, petroleum ether, diethyl ther, tetrahydrofuran, t rt-butyl methyl ether, and N,N-dimethylformamide.

17. The method according to claim 15, wherein the trihydrocarbylsilylating agent is selected from the group consisting of trihydrocarbylsilyl halide and hexahydrocarbyl disilazane.

18. The method according to claim 17, wherein the trihydrocarbylsilylating agent is selected from the group consisting of trimethylsilyl chloride, triethylsilyl chloride, triphenylsilyl chloride, ethyldimethylsilyl chloride, dimethylpropylsilyl chloride, tert-butyldimethylsilyl chloride, dimethylphenylsilyl chloride, dimethyl-phenylethyl-silyl chloride, and hexamethyl disilazane.

19. The method according to claim 15, wherein a trihydrocarbylsilyl halide is used as th trihydrocarbylsilylating agent, the reaction is carried out in the presence of a base, and the raw materials are charged at such amounts that molar ratio of 1,3-propandiol compound : trihydrocarbylsilyl halide : base is in the range of 1 : 2-5 : 2-5.

20. The method according to claim 19, wherein the base is selected from the group consisting of Na, K, NaOH, KOH, NaH, KH, CaH_2, Na_2CO_3, K_2CO_3, NH_3, Et_3N, Me_3N, Bu_3N, pyridine, imidazole, 4-dimethylaminopyridine, and mixture thereof.

21. The method according to claim 15, wherein a hexahydrocarbyl disilazane is used as the trihydrocarbylsilylating agent, the reaction is carried out in the absence of base, and the raw materials are charged at such amounts that molar ratio of 1,3-propandiol compound : hexahydrocarbyl disilazane is in the range of 1 : 1-1.6.

22. The method according to claim 15, wherein reaction temperature is in the range from -20℃ to 100℃, reaction pressure is atmospheric pressure, and reaction time is in the range from 1 to 48 hours.

23. The method according to claim 15, wherein the 1,3-propandiol compound is 9,9-bis(hydroxymethyl)flluorene compound, which reacts with a trihydrocarbylsilylating

ag nt to form a 9,9-bis(trihydrocarbylsilyloxymethyl)-fluorene compound.

24. A process for polymerization of olefins, wherein a silicon ether compound according to claim 1 is used as external electron donor compound.

25. The process according to claim 24, wherein said process is homopolymerization or copolymerization of propylene.